

# NAVARINO ENVIRONMENTAL OBSERVATORY

NEO Management

Thursday, 30 January 2013

## NEO NEA #11 (October - December, 2013)

NEO stands for Navarino Environmental Observatory. But NEO in Greek (νέο) means news as well and NEA is its plural. So this is our news!

### Foreword

Greetings from NEO!

At the end of 2013 we are happy to note that the year has been full of activities at NEO! We have seen 6 courses, 1 summer school, 4 workshops, and 5 fieldwork periods taking place and we have had no less than 219 visitors staying for in total 1119 nights at NEO Research Station!!



Field studies in a rainy day at Polylimnio (Värmdö Gymnasium)

# Activities

## *Past*

### Research

#### *Research Applications*

Karin Holmgren, together with research colleagues at Stockholm University and Xenofon Kappas, Captain Vasilis Foundation, submitted a research proposal to the Swedish research foundation FORMAS, entitled: Agricultural land: the planet's natural battery for greenhouse gases?

Antonis Koussis, NOA, in collaboration with NEO and other Greek research institutions submitted a research proposal to the Greek Ministry of Education, entitled: Open Hydrosystem Information Network

Karin Holmgren submitted a research proposal to the Institute for Aegean Prehistory, US, entitled: Eastern Mediterranean Late Glacial to Holocene Climate, Environment and Human Societies. Analysis of lake sediments from southern Greece.

NEO, via Karin Holmgren, participated in a research proposal led by Uppsala University to the Swedish Research Foundation MISTRA, entitled: Being in the Anthropocene: Re-Imagining Human-Environmental Relations in the Past, Present, and Future

### *Workshop*

During the period 7-11 October 2013 the 3rd ACTRIS WP3 Workshop took place in Athens, jointly hosted by the National Observatory of Athens (NOA), Institute of Environmental Research and Sustainable Development, and the N.C.S.R. "Demokritos" Institute of Nuclear and Radiological Sciences & Technology, Energy and Safety, Athens, Greece and under the auspices of the Hellenic Association for Aerosol Research (HAAR). ACTRIS standing for Aerosols, Clouds, and Trace Gases Research Infrastructure Network is a European Project aiming at integrating European ground-based stations equipped with advanced atmospheric probing instrumentation for aerosols, clouds, and short-lived gas-phase species. ACTRIS will have the essential role to support building of new knowledge as well as policy issues on climate change, air quality, and long-range transport of pollutants. E. Gerasopoulos as the main organizer of the event had the chance to introduce NEO activities and possibilities for hosting scientific/experimental research while together with R. Krejci presented details on instrumentation currently operating at NEO and results.

## Education

### *Courses*

- *“Natural disasters from natural and social science perspective”.*  
**Students’ course, Värmdö Gymnasium (October 12-18)**

As part of a one semester Natural Science Specialization course, at Stockholm University, a group of students from the upper secondary school, Värmdö Gymnasium, visited NEO on October 12-18. The specialization course was aimed at third year students attending the natural science programme with a global perspective, and the course theme was **“Natural disasters from natural and social science perspectives”**. During the stay at NEO Research Station visits to geological, biological and historical sights of interest were performed. The purpose of the week was to give the students deeper understanding of how the landscape is shaped through geological processes and what effect these processes have on biological systems.



Figure 1: Student and teachers from Värmdö Gymnasium, Stockholm.

- *“Water - resource management in time and space, focus Greece”.*  
**Interdisciplinary Masters course (November 25 - December 1)**

This master course is one of the courses within a broader university programme for internationalization, developed by Swedish universities and the Swedish Institutes around the Mediterranean. Following the **“Water - resource management in time and space”** course, the students were asked to focus on water quality and quantity in urban and rural areas, including examples of sustainable water usage and exploitation over time. During their visit at NEO, the students followed several lectures and also organized and implemented a series of interviews with farmers, locals, representatives from the Water Management agency of Pylos, the Captain Vassilis Foundation and associates from the Costa Navarino resort in order to deal with different aspects of water related issues for settlements and water management.



Figure 2: Students and instructors working at NEO.

## Events

### *Research workshop*

- *“Integrating calcareous plankton biostratigraphy”.*  
Science Meeting at NEO, November 2013

Four specialists in the fossil record of calcareous plankton participated in a lively working meeting at NEO from 11 to 15 November 2013: Professor Jan Backman (Stockholm University, Sweden) who hosted the meeting, Professor Bridget Wade (University College, London, UK), Professor Isabella Raffi (University of Chieti-Pescara, Italy) and Professor Paul Pearson (Cardiff University, UK). The meeting was funded through the EU-EARTHTIME initiative which is aimed at developing the next generation of geological timescale.

The four biostratigraphers worked together to develop a new common approach and terminology and to harmonize existing schemes based on the two fossil groups. Two manuscripts were developed: one on the philosophy and terminology of biostratigraphy and the second on an inter-correlation of the two groups. The meeting was outstandingly successful and will lead to a step-change in the way marine biostratigraphy is conducted in future.

## Dissemination

- *Interview*  
NEO station, October 10.

On October 10, NEO Station Manager had a meeting with Mr. Costas Chris, Editor and Columnist at National Geographic Traveler magazine and Columnist at Vistuosio Life magazine who was interested about Costa Navarino and NEO was highlighted as an important component of the sustainable development concept.

- *Interview, Research at Alepotrypa Cave in Universitetsnytt*  
Dept. of Physical Geography and Quaternary Geology, December.

Meighan Boyd, PhD student at Stockholm University, was interviewed about her NEO related research in Alepotrypa Cave for the internal journal at Stockholm University.

- *Astronomy nights*  
Costa Navarino, November 7.

The last Astronomy night for 2013 was held at Costa Navarino premises in November. While the winter sky was unraveling on top of us, the attendees had the opportunity to observe among others the Nebulae of Orion (M42), one of the most impressive nebulae that can be observed.



Figure 3: The Nebulae of Orion (ESO, 2001)

- *Café-NEO*  
Kalamata, December 7.

The *Café-NEO* meeting, organized by Navarino Environmental Observatory, is an attempt of NEO where, for the price of a cup of coffee or a glass of wine, anyone can come to explore the latest ideas in science and technology. The first *Café-NEO* for the dissemination of science to local communities was held at a café in Kalamata on December 7.

...για την  
επιθεώρηση  
της επιστήμης

# CAFÉ-NEO

**«Καφέ της Επιστήμης»**  
 τα τελευταία νέα στην Επιστήμη και στην Τεχνολογία  
 με μία κούπα καφέ ή ένα ποτήρι κρασί.

Σας περιμένουμε στην πρώτη συνάντηση του «café-NEO» με θέμα:  
**«Οικονομική κρίση και επιπτώσεις στο περιβάλλον  
 και την υγεία»**

Προσκεκλημένος εισηγητής ο Δρ. Ευάγγελος Γερασόπουλος,  
 Διευθυντής Ερευνών στο Ινστιτούτο Ερευνών Περιβάλλοντος και  
 Βιώσιμης Ανάπτυξης του Εθνικού Αστεροσκοπείου Αθηνών.

*Luna Lounge* (Αριστομένους 23)  
**Σάββατο 7 Δεκεμβρίου, στις 7μμ.**

**Θα χαρούμε να σας δούμε εκεί!**

Το «café-NEO», είναι ένας κύκλος δωρεάν και ανοιχτών προς το κοινό  
 συζητήσεων, με σκοπό την ενημέρωση σε σύγχρονα επιστημονικά θέματα, με  
 έμφαση σε κλίμα, τρέχοντα περιβαλλοντικά ζητήματα που οργανώνεται από το

**Navarino Environmental Observatory (NEO)**  
[www.navarinoneo.gr](http://www.navarinoneo.gr)

Stockholm  
University  
[www.su.se](http://www.su.se)

BRFAA  
[www.sisacademy.gr](http://www.sisacademy.gr)

TEMES  
 or TEMES  
[www.es2122navarino.com](http://www.es2122navarino.com)

Figure 4: The first *Café-NEO* at Luna Lounge cafe in kalamata

At the first *Café-NEO* meeting, the attendees had the opportunity to discuss with Dr. Evaggelos Gerasopoulos, Research Director at the National Observatory of Athens, the impacts of the Financial Crisis to environment and health.



Figure 5: The first *Café-NEO* at Luna Lounge cafe in Kalamata

- *NEO film shown at the AGU meeting, December 2014*

The NEO film “A dream came true” was chosen to be shown at the film festival at the American Geophysical Union 2013 meeting in San Francisco in December.

#### NEO management

- NEO Steering Committee was held on 30 October at TEMES offices in Athens.

## *Upcoming*

### Research

- PhD student, Ruben Fritzon (Stockholm University) will visit Messinia (Kalamata) in order to do fieldwork on fault scarps in the region. Professor Alasdair Skelton will also join the fieldwork for a few days. A portable X-ray fluorescence (XRF) analyzer will be used to identify paleoseismic information, such as number and magnitude of slips, from normal fault surfaces.

### Education

- The fourth Physical Geography course at NEO will take place on March 7-13, 2014. During the excursion the course will visit a number of different sites mainly in Messinia among them, the Gialova/Navarino Bay area, Artemisia, Verga, Loussios River, Kapsia Cave, Mesochori, Methoni and Finikounda.

### Events

- The International Workshop entitled '**Mediterranean Holocene Climate and Human Societies**' will be held at NEO on April 22-26.

## *Visits to and from NEO*

- NEO Director and NEO Station Manager met with the co-organizers of the International Workshop '**Mediterranean Holocene Climate and Human Societies**' to be held at NEO on April 22-26, 2014, in Frankfurt on December 10 - 11 for planning purposes.
- NEO Director, Karin Holmgren, will be at NEO from 28 January - 8 February.